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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/621,695	07/21/2000	Yulin Deng	7648.0006	4876

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EXAMINER

WILSON, DONALD R

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 02/28/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/621,695

Applicant(s)

DENG ET AL.

Examiner

D. R. Wilson

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) 3-66 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 1713

**DETAILED ACTION*****Response to the Election of Species Requirement***

1. Applicant's response did not include as required an affirmation of the further election of a copolymer of butyl acrylate and 3-methacrylamidopropyltrimethylammonium chloride (MAPTAC) as the specie of a cationic polymer. It is assumed that this was an oversight, but applicant needs to affirm this election in replying to this Office Action.

***Claims Withdrawn From Consideration***

2. Claims 5-12, 16-18 and 66 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected specie of the invention. As explained in Detailed Action § 9 of the previous Office Action, these claims were only included in the last Office Action to advance prosecution in the belief that applicant would amend them to read on the elected specie of the cationic copolymer. However, as this was not done the claims are withdrawn from consideration.

3. The status of the pending claims are now as follows:

a. Claims 26-65 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention.

b. Claims 3-18 and 66 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected specie of the invention.

c. Claims 1-2 are under consideration.

4. It is noted that applicant has argued that while the claims (presumably referring to Claims 5-12, 16-18 and 66) may include graft copolymers, they are in no way limited to such copolymers. However, Claims 5 and 66, and the claims depending therefrom are clearly directed to compositions of polymers made by the copolymerization of a backbone and a cationically charged monomer. It is not seen that this can lead to anything but a graft copolymer, which for reasons previously discussed are not seen to be enabled by the specification. A backbone is not a monomer used to make the polymer backbone. To argue otherwise, which appears to be the crux of applicant's argument, is repugnant to the term's (backbone) well known usage. Further, both the acrylate monomer and the cationic monomers polymerized in the examples, and as for instance are now shown in applicant's depiction on page 13 of

Art Unit: 1713

the specification, become part of the backbone. Thus, for instance, language such as the concentration of the backbone as is recited in Claim 66 can only make sense if the cationic monomer is grafted onto a backbone, i.e., where it is a side chain as opposed to being part of the backbone. The depiction on page 13 does not illustrate as alleged "a cationically charged monomer and a backbone copolymerizable with the cationically charged monomer."

#### ***Response to Amendment***

5. Applicant's amendment filed 1/2/03, has been fully considered with the following results.

6. The objection to the claims and to the specification are overcome by the amendment and the objections are withdrawn.

7. As Claims 5-12, 16-18 and 66 have been withdrawn from consideration the outstanding rejections will only be considered for the claims remaining under consideration.

8. The amendment is not deemed to be persuasive in overcoming the rejection under 35 U.S.C. § 112, first paragraph, which is maintained for reasons discussed below.

9. In regards to the previous rejections under 35 U.S.C. § 112, second paragraph, these only concerned claims no longer under consideration. Therefore the amendment to overcome those rejections will not be addressed. However, it is noted that the bases of the rejections in Detailed Actions § 12-14 and 16 were not fully addressed.

10. Arguments traversing the prior art rejections are not deemed to be persuasive for reasons discussed below.

#### ***Previously Cited Statutes***

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

#### ***Claim Rejections - 35 USC § 112, First Paragraph***

12. ***Claims 1-2 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for adhesives or adhesive coatings comprising a copolymer of a cationic monomer and a non-cationic monomer, does not reasonably provide enablement for polymers formed from a backbone polymer and a cationic monomer.*** The basis of this rejection was stated in

Art Unit: 1713

Detailed Action § 9 of the previous Office Action. Applicant's arguments appear to be addressed only to the fact that the specification is enabling adhesives or coatings comprising a copolymer of a cationic monomer and a non-cationic monomer. It is not seen that applicant has addressed the merits of the examiner's position that the specification does not reasonably provide enablement for polymers formed from a backbone polymer and a cationic monomer.

***Claim Rejections - 35 USC § 102(b)/§ 103(a)***

13. ***Claims 1-2 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mandeville.*** The basis of this rejection was stated in Detailed Action § 22-23 of the previous Office Action.

14. Applicant traverses the rejection arguing that Mandeville fails to teach or suggest an adhesive composition of cationic hydrophobic copolymers or to recite their use as adhesive paper coatings. This is not deemed to be persuasive the compositions disclosed is the same as applicant's elected specie of cationic copolymer. Intended use recitations and other types of functional language cannot be entirely disregarded. However, in apparatus, article, and composition claims, intended use must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See M.P.E.P. § 2111.03. It is not seen that the preamble of the instant claims provides a structural difference.

15. ***Claims 1-2 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bister.*** The basis of this rejection was stated in Detailed Action § 24-25 of the previous Office Action.

16. Applicant traverses the rejection on the same basis as is discussed above for the rejection over Mandeville. The traversal is not deemed to be persuasive for the same reasons. The statement that the copolymers of Bister do not form an adhesive is interesting because the compositions have the same structure as the elected species of the instant invention, and applicant has provided no basis for concluding that they do not form an adhesive.

Art Unit: 1713

17. **Claims 1-2 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Huth.** The basis of this rejection was stated in Detailed Action § 26-27 of the previous Office Action.

18. Applicant also traverses this rejection on the same basis as is discussed above for the rejections over Mandeville and Bister. The traversal is not deemed to be persuasive for the same reasons.

#### ***Art of Interest/Technological Background***

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. As previously discussed, Warren and Iwasaki disclose or make obvious MATPAC butyl acrylate copolymers and could also be used in rejecting the instant claims. Iyer, Trouve disclose MATPAC copolymers which could be used in a future rejection of non-elected species of the invention. Additionally, newly cited Matz discloses copolymers of MATPAC and alkyl acrylates which are used in paper making and could also be used in a future rejection of the instant claims.

#### ***Action Is Final***

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

21. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

22. This application contains Claims 3-4, 13-15, 19-21 and 26-65 drawn to an invention nonelected with traverse in Papers No. 4 and 6. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

#### ***Future Correspondence***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. R. Wilson whose telephone number is 703-308-2398.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 703-308-2450. The fax phone numbers for the organization where this

Art Unit: 1713

application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications. The unofficial direct fax phone number to the Examiner's desk is 703-872-9029.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-2351.

A handwritten signature in black ink, appearing to read 'D. R. Wilson', with a long horizontal stroke extending to the right.

D. R. Wilson  
Primary Examiner  
Art Unit 1713